

STATUS OF CLAIMS

Claims 1-3 and 5-24 are currently pending in the application and stand rejected for various reasons.

Claims 1, 2, 6-8, 12-20 and 24 are rejected under 35 USC 103(a) over Ito et al in view of newly cited Redfern et al.

Claims 3, 9, 10, 21 and 22 are rejected under 35 USC 103(a) over Ito et al in view of newly cited Redfern et al and further in view of Kochavi et al.

Claims 5, 11 and 23 are rejected under 35 USC 103(a) over Ito et al in view of newly cited Redfern et al and further in view of Kusakabe.

REMARKS

Applicant believes that the finality of the rejections of claims in this case is premature and was not necessitated by Applicant's amendment filed on August 24, 2006. Rather, the arguments set forth in the amendment against the cited prior art necessitated the new rejections. When such arguments are presented, which clearly show the deficiencies of the prior art, it is not uncommon for an Examiner to make a second search of the prior art to provide more relevant references. However, the inadequacies of the initially produced prior art was not the fault of the Applicant and prosecution should not be prematurely foreclosed by blaming the new rejections on the Applicant's amendment.

Applicant's amendment to claim 1 was made merely to clarify the recitation of a localized volume in compliance with the defined term referred to in at least original claims 7 and 19, as well as Figures 1 and 2, and recited on page 2, lines 22+ and page 3, lines 1-3 of the specification¹. Although the "localized volume" was already recited in the claim and fully supported by the specification, the Examiner chose to wrongly interpret the words in asserting the Ito et al patent to support a rejection under 35 USC 102(b). While the Examiner's interpretation

¹ Other references in the specification to the defined "localized volume" are found on page 4, lines 13-19 in the discussion of Figure 1; and on page 5, lines 10-11 in the discussion of Figure 2.

was argued in the Amendment as wrong, Applicant, nevertheless, made a clarifying entry to the claim. Although the structure of the claim was restructured by the language, there were no new elements added. Furthermore, the added description should have been expected when the initial search was made².

The Applicant maintains that the only reason that the Examiner chose to make a second search of the prior art was because of Applicant's arguments showing the insufficiencies in the cited prior art to support the initial rejections, rather than the amendment. Ito et al failed to support the rejection, with or without the amendment. For these reasons, the Examiner is respectfully requested to withdraw the finality of the rejection as stated in the Office Action.

The following remarks are intended to show:

- the rejections based on 35 USC 103(a) are improperly made; and
- the references cited in the rejections individually and collectively contain insufficient evidence to support the rejections.

Improperly Made Rejections:

In order to establish a *prima facie* case of obviousness, the Examiner must comply with MPEP 706.02(j). There must be an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification. And, there must be some suggestion or motivation in the references to modify one of reference teachings and a reasonable expectation of success.³

² See original claims 7 and 19.

³ MPEP 706.02(j) Contents of a 35 U.S.C. 103 Rejection

"After indicating that the rejection is under 35 U.S.C. 103, the Examiner should set forth in the Office action:

(A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate,

(B) the difference or differences in the claim over the applied reference(s),

(C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and

(D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification. "

The same section 706.02(j) of the MPEP cited above continues on to explain how the references should be collected and applied:

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge

In the present case, none of the rejections by the Examiner provide the required rational for making the alleged combinations.

The rejection of claims 1, 2, 6-8, 12-20 and 24 under 35 USC 103(a) over Ito et al in view of Redfern et al is typical of having failed to state a proper rejection. The Examiner merely alleges that "It would be obvious to modify Ito et al so that the localized volume is separate and heat insulated from the passenger compartment, in view of Redfern et al, for the purpose of providing a separate volume for the goods to be cooled and stored."

The Examiner has provided no explanation as to why someone of ordinary skill in the art would be motivated to make the alleged modifications and combinations, absent Applicant's teachings. Also, in these rejections, there is no explanation offered by the Examiner of any alleged general knowledge of one skilled in the art; nor is there any suggestion or motivation in the references themselves. At least one reference has to speak to making the combination.

The Examiner has failed to show where in Ito et al there is a suggestion that the HVAC system described therein should be modified in such a way that the air ducts should be modified to have at least one opening "...in communication with the localized volume and said evaporator core element to direct the flow of air to and from the localized volume"⁴. Likewise, the Examiner has failed to show where in Redfern et al there is any suggestion that the portable cooling unit and

generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicant's disclosure. In re Vaack, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria."(emphasis added)

⁴ Claim 1, lines 10 – 12. Similar language appears in independent claim 7, lines 8 – 10 and independent claim 19, lines 8 – 10, which were included in the rejection.

its associated air conditioning system should be used to modify a system such as described in Ito et al to provide the recited ducting elements.

The rejection of claims 3, 9, 10, 21 and 22 under 35 USC 103(a) over Ito et al in view of Redfern et al and further in view of Kochavi et al suffers from the same failure to show how the cited references suggest the alleged combination. Since these claims depend from those rejected under the Ito et al/ Redfern et al combination discussed above, the same failures there apply to this rejection. In this case, the Examiner has further failed to describe where in Kochavi et al there is a suggestion that sensors should be added to the teachings of Ito et al or Redfern et al. For instance, the recitation of a "first sensor is included for detecting the temperature of air entering the air duct from the localized volume and a second sensor is included for detecting the temperature of air leaving the air duct to the localized volume.." ⁵ is not a concept that is disclosed in Kochavi et al. Likewise there is no showing in either Ito et al or Redfern et al that such sensors should be added in a way that one would expect to see the invention recited in Applicant's claims even remotely replicated. Without suggestions in the references, the Examiner appears to be relying again on the Applicant's teachings.

The rejection of claims 5, 11 and 23 under 35 USC 103(a) over Ito et al in view of Redfern et al and further in view of Kusakabe suffers from the same failure to show how the cited references suggest the alleged combination. The Examiner merely states that because of Kusakabe's teachings of an air conditioner for a vehicle having a localized volume, "it would be obvious to provide Ito et al with a control valve for the evaporator, in view of Kusakabe, for the purpose of more precise control of the temperature of the evaporator 2." Again, the Examiner has failed to show where in Ito et al or Kusakabe there is a suggestion the Ito et al should be modified. Just because Kusakabe shows valves in a refrigeration unit, does not mean that Ito et al should be modified. Ito et al does not mention the need or desire for such valves nor does it mention where such valves would be located or the desired effect. The combination is made merely to reconstruct the

⁵ Claim 3, lines 1 – 4.

Applicant's claimed invention without regard to what the prior art actually teaches.

For at least these reasons, the rejections are improper for failing to show how the teachings of the cited references suggest the alleged combination and should be withdrawn.

The Rejections are based on Insufficient Evidence:

The newly cited Redfern et al reference discloses a portable cooler 10 with a cooling unit (evaporator) 12 that connects with an automobile air conditioner. The cooler includes an insulated cabinet 30 and a cooling unit 12. The cooling unit 12 includes a tank 40 with a heat exchanger coil 50. The tank is filled with a coolant liquid that immerses the coil. The tubing that forms the coil protrudes from the tank to a quick connect/disconnect coupling that is attached to the cabinet 30. The liquid refrigerant portion of the air conditioning system of the vehicle is configured in such a way that the portable cooler may be connected to the refrigeration system when in the vehicle and disconnected from the refrigeration system when removed from the vehicle. The liquid refrigerant that is pumped through the coil acts to cause conductive cooling to the liquid in the tank and eventually to the air contained inside the cooler.

Redfern et al does not disclose any fans or duct work to provide air movement in the cooler.

Redfern et al does not teach or even suggest that the device should be modified to substitute an air ducting system to provide refrigerated air flow into and out of the cooler cabinet.

The rejection of claims 1, 2, 6-8, 12-20 and 24 under 35 USC 103(a) over Ito et al in view of Redfern et al is insufficiently evidenced because of the failure of the either reference individually or in combination to support the combination allegation set forth.

The basic contention of the rejection is that "Ito et al discloses the claimed invention, including the localized volume which is cooled by a heat exchanger

element 2 located adjacent the localized volume and including a sensor 35 for detecting the temperature of air flowing through the air duct." In the next sentence, the Examiner admits that "Ito et al does not disclose the localized volume to be separate and heat insulated from the passenger compartment."

First, the Ito et al does not disclose the cooling of a localized volume such as recited in Applicant's claims. Rather, it shows an auxiliary HVAC and ducting system that extends the effects of the regulated heated or cooled air to the rear seating portion of the passenger compartment. It is intended to provide a more even temperature distribution throughout the vehicle in both heating and cooling modes. There is no suggestion in Ito et al of a separate localized volume that is cooled, independent of the passenger compartment temperature settings.

Second, the combination of Redfern et al with Ito et al to show a localized volume that is separate and heat insulated from the passenger compartment does not solve the inadequacies of Ito et al to support the rejection. Redfern et al shows a separate storage container that is cooled by the liquid refrigerant of the vehicle air conditioning system, but the details do not resemble the invention as claimed by the Applicant. The mere idea of a separate volume within a vehicle does not provide sufficient evidence to render an obvious modification of Ito et al. that would in any way resemble the claimed invention, let alone support a rejection under the statute.

A thorough review of both references and placing the two references side by side does not suggest the combination proffered by the Examiner. There is no suggestion in either reference to modify Ito et al. However, if one were to somehow combine the two as proposed by the Examiner, the most likely combination would be for one to modify the HVAC liquid refrigerant lines of Ito et al to provide quick connect couplings for the hook up for a portable cooler such as Redfern et al offers. However, that combination does not render the claimed invention to be obvious under the current interpretation of the statute.

It is clear that these two references in combination fail to provide sufficient evidence to support a rejection under 35 USC 103 (b) and should be withdrawn. Therefore, such withdrawal is respectfully requested.

The rejection of claims 3, 9, 10, 21 and 22 under 35 USC 103(a) over Ito et al in view of Redfern et al and further in view of Kochavi et al is unsupported by the references.

As pointed out in the above-mentioned Amendment, Kochavi et al discloses a central air conditioning system for use in cooling a plurality of rooms in a building. It also discloses the use of sensors on either side of a pair of heat exchangers. One "entrance region temperature sensor 59" is located in the proximity of and downstream of the blower 40 path prior to a pair of heat exchangers 26 and 16. It is said to provide a signal proportional to the temperature of the air immediately before it passes through the heat exchangers. A second "duct temperature sensor 57" is located in the entrance to the main duct downstream from the pair of heat exchangers 26 and 16 and is said to provide a measurement of the air as it passed through the two heat exchangers.⁶

While the Examiner has chosen to look at the portion of the air duct where the heat exchangers are located as a "localized volume" to provide some relation to the claim, this is not an acceptable interpretation from the context of Kochavi et al, where the clear purpose is to provide controlled temperature air to rooms via the air duct(s). Kochavi et al does not disclose or suggest the use of sensors located to sense air entering and leaving the rooms. Therefore it cannot be used as evidence to show that sensors can be used to monitor the air temperature entering and leaving the air duct from and to the localized volume, as is claimed by Applicant⁷.

If one were to modify Ito et al with the teachings of Kochavi et al, there is no indication in either reference as to where the sensors would be located. If one were to locate the sensors on either side of the heat exchanger of Ito et al the result would not resemble the claimed invention. If one were to locate the

⁶ Kochavi et al Col. 6, lines 7 – 13.

⁷ Claim 9.

sensors on either side of the heat exchanger shown in the cooler of Redfern et al, they would probably serve no purpose, since there is no ducted air flowing in that device.

It is clear that these three references in combination fail to provide sufficient evidence to support a rejection under 35 USC 103 (b) and should be withdrawn. Therefore, such withdrawal is respectfully requested.

The rejection of claims 5, 11 and 23 under 35 USC 103(a) over Ito et al in view of Redfern et al and further in view of Kusakabe is also unsupported by the references. As in the first Office Action, the Examiner continues to mistakenly refer to element 31 in Kusakabe as a "control valve". However, in the text, it is referred to as an "expansion valve 31" A solenoid valve 6 provides connection between the expansion valve 31 and a chilling tank 5.⁸

Kusakabe teaches an air conditioning system for a vehicle in which refrigerator and freezer chambers are controlled from a system that also controls the cooling of the front and rear portions of a passenger compartment of a vehicle. Kusakabe also discloses an expansion valve 31 and a solenoid valve 6. The solenoid valve 6 is connected to the control unit circuit 41.

There is no disclosure in Kusakabe of utilizing conditioned air flowing into and out of the confined space that defines the freezer/refrigerator 30. The mere fact that a control valve (solenoid) is disclosed, does not suggest in any way that Ito et al should be modified to include it. Applicant cannot find where Ito et al suggests the modification? Further, if one were to accept the Examiner's alleged modification of Ito et al to include a control valve, one must also ask, "where would it be?"

Summary

The Applicant argues that the finality of the rejections is premature, since the Applicant's amendment did not precipitate the new rejections. Rather, the

⁸ Kuskabe Col. 2, line 67.

inadequacies of the originally cited references caused the necessity of a new search and new rejections.

In addition, the three separate rejections of the claims made by the Examiner under 35 USC 103(a) in combination with Ito et al and noted above are improperly made. In each case the Examiner has failed to provide an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification, as is required under MPEP Section 706.02(j), subsection (D) (see footnote #2.). Since this MPEP section and case law to date requires the Examiner to show how the cited prior art suggests the combination, and that was not done, the rejections are improper.

Also, the three separate rejections are unsupported by the cited references and are insufficient to evidence the rejections. The arguments presented above point out in detail why the references fail to support the rejections and why the rejections should be withdrawn.

Therefore, it is Applicant's opinion, in view of the MPEP, the cases cited therein, and current patent laws, that the rejections under 35 USC 103 are improper, unsupported and misapplied, and should be withdrawn.

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